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SERIAL NUMBER: 07/103,192 FILING DATE: 10/01/87 INVENTOR: BERGMAN

L JPL87-008

EXAMINER: KRIESS, K

ART UNIT: 237

PAT. JOURNAL: 12

DATE MAILED: 05/21/91

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This is a communication for the examiner in charge of your application  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined. ☒ Responsive to communication filed on 2-19-91 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 3 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/>   |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-4, 6-12, 14-22 and 24-41 are pending in the application.  
Of the above, claims 6-10, 14-18 and 24-36 are withdrawn from consideration.
2. ☐ Claims 5, 13 and 23 have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-4, 11, 12, 19-12 and 37-41 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

1. Applicant's arguments with respect to claims 1-4, 11, 12, 19-22 and 37-41 have been considered but are deemed to be moot in view of the new grounds of rejection.
2. Claims 1-4, 11, 12, 19-22, 37 and 38 are rejected under 35 U.S.C. § 103 as being unpatentable over Morton.
3. Morton teaches a processor cell very similar to Applicant's claimed computer. Morton discloses the invention substantially as claimed including executing instructions in a dynamically reconfigurable (optimum) manner by enabling and disabling (selection) various processing elements (logic means) based on software control and the data being operated on. See abstract of Morton. It is noted that Morton does not specifically disclose of determining a "class" of the functions for each instruction as is claimed. However Morton does teach of selecting various processing elements based on conditions under software control according to the data being operated on. One skilled in the art would recognize that such conditions based on the data actually define a "class of each function," since each of the different types of data would classify such as a different "class" of data which corresponds to the different function based on the data. Thus Morton does suggest determining a "class" of the functions as claimed and therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form a system on which the claims read based on the teaching of

Serial No. 103,192

-3-

Art Unit 237

Morton.


4. Claims 39-41 are rejected under 35 U.S.C. § 103 as being unpatentable over Morton in view of McAulay.

5. Morton discloses the invention substantially as claimed, as above, but does not disclose transmitting and switching signals optically to various elements handling the routines. However, McAulay teaches the use of optical interconnections for processing communication transmissions and switching for the purpose of faster more efficient dynamic reconfigurability. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Morton's signal interconnections with optical interconnections as taught by McAulay in order to provide Morton with faster and more efficient signal routing and thus form a system and method on which the claims read.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin A. Kriess whose telephone number is (703) 308-3098.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0754.

KAK/MS  
May 13, 1991

  
KEVIN A. KRIESS  
EXAMINER  
ART UNIT 237